

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

WESLEY WON, DENNIS SPEERLY,
JOSEPH SIERCHIO, DARRIN DEGRAND,
DANIEL DRAIN, WAVERS SMITH,
RICHARD FREEMAN, CHRISTOPHER GILES,
LOUIS RAY, RICHARD SULLIVAN,
DANIEL BAPTIST, DENNIS SPEERLY,
JOHN IASIELLO, BENJY TOMPKINS,
JAMES NORVELL, MICHAEL BANKS,
GUY CLARK, MARIA BARALLARDOS,
CARY SHERROW, JASON KEVIN SINCLAIR,
KIMBERLY COULSON, TROY COULSON,
ANDRE MCQUADE, DONALD DYKSHORN,
TAIT THOMAS, JAMES PAUL BROWNE,
WILLIAM FREDO, DONALD SICURA,
JON ELLARD, RHIANNA MEYERS,
RANDALL JACOBS, MICHAEL PONDER,
PHILIP WEEKS, KARINA FREDO,
JIMMY FLOWERS, STEVEN BRACK,
KEVIN WESLEY, BRIAN LLOYD,
GREGORY BUTSCHA, JERRY CARROLL,
KIMBERLY CARROLL, DOMINIC EATHERTON,
THOMAS EDMONDSON, RICHARD FILIAGGI,
ROBERT HIGGINS, and DAVID THOMPSON,

Case Number 19-11044
Honorable David M. Lawson
Magistrate Judge David R. Grand

Plaintiffs,

v.

GENERAL MOTORS, LLC,

Defendant.

**OPINION AND ORDER ON VARIOUS MOTIONS TO EXCLUDE
CERTAIN EXPERT WITNESS TESTIMONY**

In these consumer automobile defect cases, the parties have filed motions challenging the admissibility of the testimony of six expert witnesses on various grounds. The witnesses will offer testimony, presumably via affidavits, for the class certification phase of the case. The defendant

has challenged the testimony of four witnesses, and the plaintiffs two. For the reasons discussed below, all six motions will be denied.

I. Background

The context of the case is familiar by now and was discussed at length in the Court's two prior opinions on the defendant's pleading challenges to the amended class action complaint. The plaintiffs allege that the automatic transmissions in their cars occasionally will "slip, buck, kick, jerk and harshly engage." They say that when the transmission causes the vehicle to perform erratically, such as with sudden or delayed acceleration, the vehicles may be unsafe to drive. All of the car and truck models implicated by this suit were made by defendant General Motors, LLC between model years 2015 and 2019. The plaintiffs filed several suits, which were consolidated in this Court on behalf of putative classes including the owners of thousands of vehicles that, they claim, have defective transmissions, which GM has refused to fix or replace under its express warranty.

In a 2,920-paragraph consolidated amended class action complaint (CACAC), which spans more than 900 pages, including attached exhibits, the plaintiffs pleaded causes of action under the laws of 31 states sounding in breaches of express and implied warranties; common law fraudulent omissions and statutory consumer fraud; violations of various state laws governing consumer sales, deceptive marketing, and unfair trade practices; and unjust enrichment. The putative classes that have been proposed for certification consist of domestic buyers and lessors of GM cars and trucks equipped with its Hydra-Matic 8L90 and 8L45 transmissions. The class vehicles include the 2015 through 2019 model year Chevrolet Silverado; 2017-2019 Chevrolet Colorado; 2015-2019 Chevrolet Corvette; 2016-2019 Chevrolet Camaro; 2015-2019 Cadillac Escalade and Escalade

ESV; 2016-2019 Cadillac ATS, ATS-V, CTS, CT6, and CTS-V; 2015-2019 GMC Sierra, Yukon, Yukon XL, and Yukon Denali XL; and 2017-2019 GMC Canyon.

The consolidated amended complaint aggregates claims brought by individuals in five separately filed civil actions (file numbers 19-11044, 19-11802, 19-11808, 19-11875, and 19-12371), which were assigned or reassigned to this Court and consolidated for all pretrial proceedings. The parties stipulated to dismiss many of the originally named individual plaintiffs, and the plaintiffs, with leave granted, also have filed two addendums to the amended complaint naming replacement plaintiffs from most states. The Court also granted in part motions to dismiss certain claims and plaintiffs. Although the case as it stands includes claims under the laws of 31 states, the plaintiffs have moved for certification of classes embracing only 26 of those jurisdictions (omitting California, Connecticut, Indiana, Ohio, and Oregon).

The discovery period relating to class certification issues closed, and the parties timely filed their motions challenging expert witnesses relating to class certification. The plaintiffs filed their class certification motion, which is scheduled for a hearing later next month.

II. Rules of Decision

As a general rule, witnesses may not testify at trial unless they have personal knowledge of the facts about which they testify. Fed. R. Evid. 602. An exception to that rule exists for certain individuals who have special knowledge about a subject that extends beyond the common knowledge of jurors and may be helpful to them to decide a case. *United States v. Rios*, 830 F.3d 403, 413 (6th Cir. 2016). Those individuals — sometimes called “experts” — are allowed to testify in the form of an opinion based on information made known to them by others. Fed. R. Evid. 702, 703. The general criteria for the admission of expert testimony and the Court’s role as gatekeeper are familiar to the parties but bear repeating.

Evidence Rule 702, which governs expert testimony generally, was modified in December 2000 to reflect the Supreme Court’s emphasis in *Daubert v. Merrell Dow Pharmaceuticals., Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), on the trial court’s gatekeeping obligation to conduct a preliminary assessment of relevance and reliability whenever a witness testifies to an opinion based on special knowledge. The Court “has a ‘gatekeeping role’ in screening expert testimony to ensure that only reliable testimony and evidence go to the jury.” *United States v. Gissantaner*, 990 F.3d 457, 463 (6th Cir. 2021) (citing *Daubert*, 509 U.S. at 597).

But there is no jury at this stage of the case. The law is unsettled on the extent to which the *Daubert* analysis applies to expert testimony offered solely to inform the Court’s Rule 23 analysis. In the context of class certification, the Court must determine, among other things, whether “questions of law or fact common to class members predominate over any questions affecting only individual members.” Fed. R. Civ. P. 23(b)(3). “The ‘predominance inquiry tests whether proposed classes are sufficiently cohesive to warrant adjudication by representation.’” *Tyson Foods, Inc. v. Bouaphakeo*, 577 U.S. 442, 453 (2016) (quoting *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 623 (1997)). “This calls upon courts to give careful scrutiny to the relation between common and individual questions in a case. An individual question is one where members of a proposed class will need to present evidence that varies from member to member, while a common question is one where the same evidence will suffice for each member to make a *prima facie* showing or the issue is susceptible to generalized, class-wide proof.” *Ibid.* (quotations omitted).

Some federal courts “‘have held that on a motion for class certification, the evidentiary rules are not strictly applied and courts can consider evidence that may not be admissible at trial.’” *Ganci v. MBF Inspection Servs., Inc.*, 323 F.R.D. 249, 257 (S.D. Ohio 2017) (quoting *Rockey v.*

Courtesy Motors, Inc., 199 F.R.D. 578, 582 (W.D. Mich. 2001)). Nevertheless, some circuits, including the Sixth, have held that, when considering expert testimony that is offered to inform the Court’s Rule 23 analysis, the Court does not abuse its discretion by invoking the familiar *Daubert* framework to evaluate whether the expert’s opinion is sufficiently reliable and informative to be considered. *See In re Carpenter Co.*, No. 14-0302, 2014 WL 12809636, at *3 (6th Cir. Sept. 29, 2014) (observing that “[t]he Supreme Court has never decided whether a district court must undertake a *Daubert* analysis at the class-certification stage . . . but . . . the Court has suggested that such an analysis may be required in some circumstances”) (citing *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338 (2011)); *see also Schechner v. Whirlpool Corp.*, No. 16-12409, 2019 WL 978934, at *3 (E.D. Mich. Feb. 28, 2019) (“The Supreme Court has not decided whether a district court must undertake a *Daubert* analysis at the class-certification stage[,] [but] [t]he Sixth Circuit has held that a district court does not abuse its discretion in applying *Daubert* to critical expert witnesses. [Although the court of appeals has acknowledged the split of authority on this question,] [t]he Sixth Circuit has not directly determined the extent to which a district court must apply *Daubert* during the class certification stage.” (collecting cases)).

The parties do not appear seriously to contest whether the *Daubert* analysis applies at this stage of the case, and there are several indicators from appellate courts suggesting that it does. In prior rulings in similar litigation the Court has assumed that a *Daubert* analysis is appropriate, keeping in mind, however, that the challenged testimony is not being offered to prove the merits of the plaintiffs’ claims, but only to establish that the merits of those claims properly can be adjudicated by means of collective litigation.

Turning to the governing law, Rule 702 states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

The language added by the 2000 amendment — subparagraphs (b) through (d) — restates *Daubert*’s insistence on the requirements that an expert’s opinion be based on a foundation grounded in the actual facts of the case, that the opinion is valid according to the discipline that furnished the base of special knowledge, and that the expert appropriately “fits” the facts of the case into the theories and methods he or she espouses. *See Daubert*, 509 U.S. at 591-93. In essence, the Court “must find the expert to be: (1) qualified; (2) her testimony to be relevant; and (3) her testimony to be reliable.” *United States v. LaVictor*, 848 F.3d 428, 441 (6th Cir. 2017) (citing *Daubert*, 509 U.S. at 589).

An expert’s opinion is not relevant unless it is based on the actual facts of the case. *Lee v. Smith & Wesson Corp.*, 760 F.3d 523, 529 (6th Cir. 2014) (Keith, J. dissenting) (“The ‘relevancy’ prong of Rule 702 requires that an expert’s theory adequately ‘fit’ the facts of the case. Expert testimony that does not fit the facts does not relate to an issue in the case and, therefore, is not relevant.”) (citing *Daubert*, 509 U.S. at 591). An opinion is “reliable” from an evidentiary standpoint if it is “valid” according to the discipline upon which it is based. *See Daubert*, 509 U.S. at 590. In determining validity, the Court’s focus is on principles and methodology, not results.

Even where an expert’s opinion does not embrace the specific factual situation at hand, he or she still may be able to offer testimony helpful to the factfinder. The 2000 amendments to Rule 702 did “not alter the venerable practice of using expert testimony to educate the factfinder on general principles.” Fed. R. Evid. 702 Advisory Committee Notes to 2000 Amendments. Rule

702 allows an expert to “testify in the form of an opinion *or otherwise*” (emphasis added), which means that the expert may share his or her special knowledge with the factfinder in areas that might extend beyond the information known to the average person. *See, e.g., Redmond v. United States*, 194 F. Supp. 3d 606, 615 (E.D. Mich. 2016) (stating that an expert’s testimony could be helpful to the jury if the information is “beyond the ken of common knowledge”) (citing *Berry v. City of Detroit*, 25 F.3d 1342, 1350 (6th Cir. 1994)). However, when an expert’s testimony does not take the form of an opinion, but rather focuses on “educat[ing] the factfinder on general principles,” application of the foundational elements in Rule 702 takes on a different cast. Take *First Tennessee Bank National Association v. Barreto*, 268 F.3d 319 (6th Cir. 2001), for example. In that case, the expert witness described industry customs dealing with prudent banking practices. The court held that the *Daubert* factors were not helpful in determining the admissibility of an expert’s testimony on whether the plaintiff followed such practices. It reasoned that because the basis of the expert’s testimony was his “own practical experiences throughout forty years in the banking industry,” his testimony was not the sort that “len[t] [it]sel[f] to scholarly review or to traditional scientific evaluation.” *Id.* at 335.

III. Defendant’s Motions

A. Samantha Iyengar

Dr. Samantha Iyengar is an Associate Director at NERA Economic Consulting. She was engaged by the plaintiffs “to conduct research to determine whether knowledge of allegedly defective 8-speed automatic transmissions produced by General Motors, LLC (‘Class Vehicles’) would have impacted consumers’ likelihood of purchasing the Class Vehicles,” with the understanding that the data from her study would be used by the plaintiffs’ economic expert to “offer an opinion on how the results of my research [] may reflect on the but-for price customers

would have paid for the Class Vehicles had GM disclosed the existence and extent of the alleged drive quality or shudder issues.” Expert Report of Dr. Samantha Iyengar dated Oct. 9, 2021, ECF No. 170-5, PageID.5575. Her research consisted of a consumer survey, which she designed.

Dr. Iyengar reports that she has “over 10 years of experience in the field of survey design and application, sample design and estimation, data management and statistical analysis in academic and litigation contexts,” and that she has “worked on a variety of survey and sampling projects for litigation and arbitration, including trademark, trade dress, false advertising, consumers’ willingness-to-pay for patented product features, purchase and use behaviors, likelihood of confusion, and other issues involving consumer perceptions and behavior.” *Ibid.* She holds B.A. and M.A. degrees in Sociology from the University of Montana and M.A. and Ph.D. degrees in Sociology from the University of Iowa, and before her work with NERA she was an Assistant Professor of Criminal Justice at the University of Michigan, Flint and an Assistant Professor of Sociology at the University of Idaho, where she taught courses including “Methods of Social Research.” *Id.* at 5575-76. She has conducted consumer choice surveys, prepared expert reports, and testified in other civil suits involving intellectual property, product liability and mass torts. *Id.* at 5575. The defendant does not challenge Dr. Iyengar’s qualifications to offer the opinions in her report.

Iyengar’s report discloses that when preparing her survey, she reviewed the class complaint and other documents and deposition testimony that were produced through discovery in this case. Her report also included an overview of general principles of survey design for conjoint choice analysis. Iyengar then “designed, implemented and analyzed data from 7 Choice Based Conjoint (CBC) Surveys, corresponding to the 7 Class Vehicle segments,” and she represents that the “design of [her] research follows generally accepted principles for the design of surveys to be used

as evidence in litigation.” Expert Report at PageID.5584. According to Iyengar, “[t]he relevant population for this matter can reasonably be understood as past consumers of GM Class Vehicles, as well as potential future consumers of vehicles within the relevant vehicle segments,” and she therefore “conducted surveys of 7 vehicle segments, which include Class Vehicles, along with comparable vehicles offered for sale by other manufacturers.” *Id.* at 5585. “To qualify for [the] study, potential respondents had to indicate that they had purchased a passenger vehicle in a relevant segment since 2015 or expect to purchase a passenger vehicle within the next 12 months and would consider a make/model within one of the relevant segments,” and “respondents had to indicate that they are the primary or shared decision maker with regards to the past or expected vehicle purchase, as well as one of the primary drivers of the vehicle.” *Id.* at 5586.

Iyengar noted that descriptions of the defect included in the survey were drawn from documents the defendant disclosed that described the defect, and the survey methodology in general was designed to track similar surveys widely used by GM itself to study consumer valuation of car features. The survey included information about both the alleged defect, and also informed respondents about eight other “attributes” of the cars they were asked to choose from, including (1) make and model, (2) engine, (3) transmission, (4) drivetrain, (5) “options package,” and (6) price. The survey also included photos of each model as a depiction of the “appearance” attribute, which was found in prior GM surveys to be a highly significant factor for car buyers in the relevant segments. With respect to the “transmission” attribute, respondents were offered choices of vehicles with 8-speed transmissions having various “service rates” ranging from 0% to 35%, reflecting the range of proportions of class vehicles of different models that had been subject to transmission recall related servicing by the defendant. *Id.* at 5599. Finally, the respondents also

were informed that all of the cars were covered by a vehicle warranty providing specified terms for years and mileage.

Iyengar reported that “[a] total of 4,956 respondents completed [her] surveys and passed all quality checks,” and “[e]ach of these respondents completed 12 choice tasks, yielding a total of 59,472 choices, each with 4 vehicles, yielding a total of 237,888 vehicle options across all segments.” *Id.* at 5605. Based on data from her surveys, Dr. Iyengar concluded that “consumers view 8-speed transmission [] service rate as a negative attribute in connection with the vehicle segments including Class Vehicles,” and that “in every vehicle segment [] surveyed, consumers are less likely to purchase a vehicle with the alleged defect (i.e., shudder or drive quality issues as described with 8-speed automatic transmission vehicles with a service rate greater than 0 percent) as compared to a vehicle without the alleged defect (i.e., 8-speed automatic transmission with a 0 percent service rate), holding all else constant.” *Id.* at 5610.

The defendant’s main argument is a kind of reverse relevancy attack. GM says that Iyengar’s economic survey results should be excluded because the plaintiffs’ fellow expert, Richard Eichmann, who was to use the survey results as part of his expert review, implicitly conceded in his rebuttal report that Iyengar’s survey results were flawed and unreliable, because Eichmann responded to criticisms about a “coding error” in his own work — which had been identified by defendant’s expert, Lorin Hitt — by “adjusting” the data produced by Iyengar to rectify the errors in his own analysis. GM then asserts that because Iyengar’s data was “adjusted” by plaintiffs’ economic analyst, any testimony about her original work is irrelevant to the plaintiffs’ calculations of damages, because her flawed results were not actually used for those calculations.

This argument is flawed. First, Dr. Iyengar did not rely on Dr. Eichmann's work or any information furnished by him on the way to formulating her opinions. If Dr. Eichmann altered her conclusions, that does not have an upstream effect on Dr. Iyengar's methods or the validity of her work standing alone. More importantly, though, the record does not support the premise of GM's argument. As discussed below, Dr. Eichmann says that he did not adjust Dr. Iyengar's data. He says that it is GM's expert, Dr. Hitt, that made coding errors and that he stuck with the results that Dr. Iyengar furnished.

GM also criticizes the methodology Dr. Iyengar used to construct her survey, contending that Dr. Iyengar made unrealistic assumptions (postulating class vehicles with "zero percent service rates"), improperly focused on transmission defects, used a survey construct that did not mimic a consumer's "real world decisions," did not consider a representative sample, and conflated the types of defects the vehicles manifested. These criticisms, however, merely impeach the factual basis of the opinion and not the reliability of Dr. Iyengar's methods. Because the Court acts merely as a gatekeeper, *Gissantaner*, 990 F.3d at 463, "and not a factfinder, an expert whose methodology is otherwise reliable should not be excluded simply because the facts upon which his or her opinions are predicated are in dispute, unless those factual assumptions are 'indisputably wrong,'" *In re FCA US LLC Monostable Elec. Gearshift Litig.*, 382 F. Supp. 3d 687, 698 (E.D. Mich. 2019) (quotations omitted). GM has not made that showing.

Dr. Iyengar's methodology is well recognized in the field. "Marketers and marketing researchers have used conjoint analysis since the early 1970's to determine the values consumers ascribe to specific attributes of multi-attribute products and to understand the features driving product preferences. The contribution of an attribute to overall product preference, i.e., the 'relative importance' of a particular attribute, is the attribute's 'partworth.' Partworth estimates

can be used to assess how consumers value the elements of a specific product variable.” *In re ConAgra Foods, Inc.*, 90 F. Supp. 3d 919, 1026 (C.D. Cal. 2015), *aff’d sub nom. Briseno v. ConAgra Foods, Inc.*, 844 F.3d 1121 (9th Cir. 2017) (footnotes omitted)). Similarly here, GM has not suggested that Dr. Iyengar’s proposed analysis deviates in any significant way from the usual principles by which conjoint analysis surveys are designed. Surveys like this have been approved as a means to estimate overpayment by car buyers in class action cases involving allegedly defective automobile control designs. *In re MyFord Touch Consumer Litig.*, 291 F. Supp. 3d 936, 943 (N.D. Cal. 2018).

Moreover, the testimony is offered now at the class certification stage of the case. The question it addresses is whether a common question of fact exists that can be answered in the context of this collective litigation, which questions whether the plaintiffs suffered damages due to overpaying for defective and unsafe cars. For that limited purpose Dr. Iyengar has supported her testimony with sufficient data and employed a reliable method that allows her to proffer an opinion that common damages were sustained and can be estimated by reliable and accepted means. GM’s challenges — to the soundness of certain underlying factual assumptions or to the weight of her analysis — are questions properly for the fact finder to consider. *In re Arris Cable Modem Consumer Litig.*, 327 F.R.D. 334, 372-73 (N.D. Cal. 2018); *Cardenas v. Toyota Motor Corp.*, No. 18-22798, 2021 WL 5811741, at *5 (S.D. Fla. Dec. 6, 2021) (collecting cases).

GM has not shown that Dr. Iyengar’s opinions are inadmissible.

B. Richard Eichmann

Dr. Richard Eichmann is a Managing Director for NERA Economic Consulting. He was engaged by plaintiffs’ counsel to estimate the damages sustained by the plaintiffs resulting from the alleged defect in GM’s 8L transmissions used in class vehicles.

Dr. Eichmann's career spans 25 years of work as an economist, during which he has "performed numerous quantitative forecasts, econometric models, valuations, and statistical and damages model analyses." Expert Report of Dr. Richard Eichmann dated Oct. 9, 2021, ECF No. 179-2, PageID.8172. He says that in numerous legal matters, he "filed expert reports on the application of statistical methods, sampling, survey design, business valuation, market simulations, and econometrics as they pertain to the calculation of damages and lost profits," and he has been qualified as an expert witness in state and federal courts to opine on similar topics. *Ibid.* He has been certified by the National Association for Certified Valuators and Analysts (NACVA) as a "Certified Valuation Analyst" (CVA) and a "Master Analyst in Financial Forensics" (MAFF) in commercial damages. Prior to his present position at NERA, he "worked for J.D. Power and Associates as an analyst performing forecasting and economic analysis in connection with econometric and discrete choice modeling surveys within the automotive industry." *Ibid.* He holds bachelor's degrees in economics and philosophy and a master's degree in applied economics from the University of Michigan. The defendant does not challenge Dr. Eichmann's qualifications as an economist or his prowess to opine on the topics in his report.

Dr. Eichmann's report lists voluminous sources of information that he reviewed including academic literature pertinent to techniques for estimating such damages, pleadings and documents disclosed by the defendant during discovery in this case, documents relating to NHTSA's investigation of defect reports for the class vehicles, service bulletins and reports of GM internal studies about the defect, and deposition testimony by the defendant's engineers and other witnesses.

Dr. Eichmann postulated three methods for estimating the different types of damages alleged by the plaintiffs. First, he applied a "market simulation" methodology to the results of a

conjoint choice survey produced by plaintiffs' fellow expert, Samantha Iyengar, to estimate the amount of overpayment or "price premium" damages incurred. By that analysis he concluded that "economic market simulations demonstrate [that] class members paid a price premium of at least \$1,318 for the class vehicles on average," *id.* at 8192, which, based on sales of approximately 800,000 class vehicles, amounted to total overpayment damages of approximately \$1.04 billion. Second, from a review of GM's own extensive warranty service records, Dr. Eichmann determined that on average the cost to repair vehicles that had been submitted for correction of "shudder" issues was at least \$300 per vehicle, and the cost for transmission modification or replacement to cure "hard shift" issues was conservatively \$1,250, yielding an average estimated cost of repair of more than \$1,550 per vehicle, or \$1.25 billion for all class vehicles. Third, Eichmann performed a "hedonic regression analysis" on third-party vehicle resale data to estimate that class vehicle owners suffered an estimated \$1,372 per vehicle on average in diminished resale value, amounting to class-wide damages of at least \$1.1 billion.

GM argues that Dr. Eichmann's testimony about methodology that could be used to calculate common damages on a class-wide basis must be disregarded because he used the manufacturer suggested retail price ("MSRP") as a benchmark of market value, which, GM says, is not an accurate measure of a vehicle's value; his estimate of "cost of repair" for class vehicles is unrealistic; his estimate of "diminution in value" ignores other factors that affect a vehicle's resale value such as age, mileage, and condition; and his damage estimates are invalid because he only calculated damages for individuals on an "average" basis across the entire population of class members.

These arguments are not persuasive. As noted above, the use of conjoint surveys as a foundation for modeling class-wide damages in product defect cases has been held by this Court

and by many others to be a valid and reliable method. *In re FCA US LLC Monostable Elec. Gearshift Litig.*, 382 F. Supp. 3d at 697. Similarly, other federal courts have rejected in other cases all of the same criticisms leveled by the defendant, and Eichmann’s testimony based on his espoused market simulation and hedonic regression methods regularly has been accepted as admissible evidence demonstrating class-wide damages in product defect cases. *E.g., Allegra v. Luxottica Retail N. Am.*, No. 17-5216, 2022 WL 42867, at *60 (E.D.N.Y. Jan. 5, 2022) (holding that the defendant’s “multi-pronged attacks on Eichmann’s simulation, which focus in large part on his reliance on Butler’s survey and WTP estimate as key inputs,” were unconvincing and that “Eichmann’s opinion is based on data, a methodology, or studies” were “[i]nadequate to support the conclusions reached”); *Johannessohn v. Polaris Indus., Inc.*, 450 F. Supp. 3d 931, 972-73 (D. Minn. 2020) (holding that “Eichmann’s methodology is admissible,” and that a market simulation is a scientifically valid method to determine the market equilibrium price in a counterfactual world”), *aff’d*, 9 F.4th 981 (8th Cir. 2021). Those same courts readily have found that all of the arguments raised by the defendant go to the weight, not the admissibility, of the testimony.

Moreover, as the plaintiffs point out, the Court previously held that expert testimony by defendant’s expert Bruce Strombom was admissible in the defendant’s presentation at the class certification phase of the *Monostable Gearshift* litigation to suggest — via the same sort of “hedonic regression” analysis employed by Eichmann in this case — that the plaintiffs had not suffered any diminution in value of their vehicles after the point of sale. *In re FCA US LLC Monostable Elec. Gearshift Litig.*, 382 F. Supp. 3d at 696. The defendant has not identified any good ground for excluding materially similar expert testimony based on the same methodology of hedonic regression analysis in this case. The fact that a method does not yield a precise measure of damages for every individual class member does not mean that the testimony is inadmissible or

unhelpful for the purpose of determining if a method exists to determine classwide damages, because “it is appropriate for the proposed damages to be approximations.” *Ramos v. Banner Health*, 1 F.4th 769, 780 (10th Cir. 2021). And the plaintiffs here plausibly have explained how the damages for individual claimants reasonably could be determined on an individualized basis from the proposed class-wide approximations.

GM also argues that Dr. Eichmann’s “market simulation” methodology is flawed due to a “fatal error” in the arithmetic embodied by his software code used to produce the simulation data. But the alleged “fatal error” was addressed by Dr. Eichmann in a rebuttal report, where he explained that GM’s expert merely introduced his own erroneous “correction” into Eichmann’s code, then claimed that the resulting (modified) formula produced “nonsensical” results:

In my Initial Report, I estimated the price premium damages paid by consumers using an economic market simulation that incorporates market share data produced by GM, pricing data from JD Power, and Dr. Iyengar’s findings regarding the change in consumer preferences from disclosing the alleged transmission defect. My market simulation is calibrated to real world market data and estimates certain unknown market parameters internally within the model, which are demonstrated to be sensible. Dr. Hitt opines that my economic simulation sometimes produces economically nonsensical parameters, but this occurs only after Dr. Hitt alters my computer code to correct for what he claims is a “critical coding error.”

To clarify, Dr. Hitt opines that my market simulation code contains a “critical coding error” and he purports that I “used the incorrect formula to compute a matrix multiplication,” leading to “economically nonsensical” results in my market simulation. These assertions are incorrect.

My code takes a “representative consumer” approach, averaging across a set of price coefficient draws for each simulated consumer, and as such the formula I use in my code is correct. The “representative consumer” approach is commonly employed in studies of oligopolistic competition. My market simulation code is a proper calculation that produces economically meaningful results under this assumption, as previously noted.

Dr. Hitt’s alleged “correction” to my code is simply an attempt to employ a different approach than that of my “representative consumer” approach. Dr. Hitt’s alternative approach, were it executed properly, seeks to allow for more heterogeneity across consumers in the market simulation. Dr. Hitt’s version of the market simulation

code is a competing alternative approach that can, if done properly, produce economically meaningful results.

However, Dr. Hitt fails to execute his alternative approach properly because Dr. Hitt fails to calibrate his market simulation to known real-world data after making changes to my code. It is Dr. Hitt's failure to calibrate his now altered market simulation to real-world data (not, as he claims, a "critical error" in my approach) which creates the economically nonsensical results in his distorted version of my market simulation.

It is well known that in order to properly capture real-world market conditions, market simulations must be calibrated to match known real-world data. I describe the calibration process for my market simulation in my original report. Upon adopting a different approach than my original market simulation code, Dr. Hitt should have made an adjustment to recalibrate the model (especially upon seeing the nonsensical results). However, Dr. Hitt stops short of providing a reliable alternative approach because of his failure to calibrate the market simulation, which renders his (not my) results nonsensical.

Rebuttal Report of Dr. Richard Eichmann, ECF No. 172-5, PageID.5770-71.

Dr. Eichmann's rebuttal report adequately defends the propriety of his methods and represents that the dispute between the experts is over which of two acceptable methods should be used to calculate damages. Moreover, Dr. Eichmann plausibly asserts that it was Dr. Hitt's alteration of his algorithm that led to the "nonsensical results," not a "fatal error" in the original code. Competing testimony by opposing experts about which method is more appropriate merely serves to inform the Court's determination about how much weight to give the opposing conclusions when making the Rule 23 determination. The fact that the experts apply different methods to derive opposing conclusions from the same data does not supply grounds for the exclusion of one opinion in deference to the other. *Elosu v. Middlefork Ranch Inc.*, 26 F.4th 1017, 1020 (9th Cir. 2022) ("Although a district court may screen an expert opinion for reliability, and may reject testimony that is wholly speculative, it may not weigh the expert's conclusions or assume a factfinding role."); *see also Boerste v. Ellis, LLC*, No. 17-00298, 2021 WL 6101678, at *15 (W.D. Ky. Sept. 29, 2021), *R&R adopted*, 2021 WL 5449003 (W.D. Ky. Nov. 22, 2021)

(“Faced with this competing testimony, the undersigned finds that these issues too go to the weight, not the admissibility of Gibson’s testimony. As the notes to Fed. R. Evid. 702 explain, the rule ‘is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise.’ Fed. R. Evid. 702 advisory committee’s notes to 2000 amendments.”). “The mere fact that two experts disagree is not grounds for excluding one’s testimony.” *Feliciano-Hill v. Principi*, 439 F.3d 18, 25 (1st Cir. 2006). Dr. Eichmann cited numerous academic sources supporting his position that the method he selected is widely accepted, and criticisms about his application of the method, again, bear on the weight, not the admissibility of the conclusions. *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002).

In a gross oversimplification, GM argues that Dr. Eichmann’s testimony about estimated repair cost damages would not be “helpful to the jury” because “all he did” was to multiply one number (estimated cost per vehicle, drawn from documents disclosed by GM), by another number (total number of class vehicles sold) to arrive at a sum of purported repair cost damages that would be incurred to fix all of the class vehicles sold. However, as the plaintiffs point out, in order to derive the quantities used in that “simple math,” Dr. Eichmann spent considerable time sifting through a mountainous data set disclosed by the defendant, which included multiple spreadsheets with hundreds of thousands of rows of data, including extensive amounts of data relating to models other than the class vehicles. Also, as Dr. Eichmann noted in his rebuttal report, the task was complicated initially because GM did not disclose all of the details needed to select accurately only class vehicles from the data set. Therefore, he initially was required to cross-reference the data set with other publicly available information, in order to select only class vehicles. When a more complete data set with full details finally was produced, along with the report of the defendant’s expert, then Eichmann collated the data again, and as a result he revised his repair

estimate downward based after identifying a lower number of vehicles sold. Rebuttal Report of Richard Eichmann, ECF No. 172-5, PageID.5768-69. The defendant's assessment that the plaintiffs' expert did "nothing more" than multiply two numbers is not borne out by the record.

Moreover, as the plaintiffs correctly point out, "[t]here is not, as [the defendant] suggests, an implicit requirement in Federal Rule of Evidence 702 for the proffered expert to make *complicated* mathematical calculations." *WWP, Inc. v. Wounded Warriors Fam. Support, Inc.*, 628 F.3d 1032, 1040 (8th Cir. 2011). Sorting through hundreds of thousands of records of vehicles sales, matching up those records with publicly available data, and reviewing and revising the data selected to ensure that only class models are considered, certainly is a task that is well beyond the capabilities of ordinary jurors. More to the point, at this stage of the case it also is work that the Court could not reasonably be expected to undertake on its own. The conclusions derived through that prodigious labor contribute tangibly to the factual record pertaining to class certification, and the testimony will be helpful to the Court in making its Rule 23 determination.

There is no basis to exclude Dr. Eichmann's opinions at this stage of the case.

C. Alice Wachs

Dr. Alice Wachs is the President of Integral Concepts, Inc. in Detroit, Michigan, and formerly was a Managing Scientist for Exponent, in Menlo Park, California. The plaintiffs engaged her in this case to "review and analyze GM warranty data as it pertains to warranty repairs for 'shudder' and 'harsh shift/drive quality' on Class Vehicles associated with the defect alleged in this lawsuit," "to review GM documents related to transmission issues," and "to identify, review, and analyze information needed to perform a warranty forecast." Expert Report of Dr. Alice Wachs, ECF No. 182-1, PageID.8773.

Dr. Wachs holds a bachelor's degree in mathematics, master's degrees in statistics and industrial engineering, and a Ph.D. in operations research and applied mathematics, all from the University of Michigan. From 1993 through 2006 she was a teaching assistant, instructor, and adjunct professor at the University of Michigan's College of Engineering. Her post-academic career in statistical analysis spans more than two decades in various positions. Her CV notes dozens of academic publications, and various other product defect litigations in which she was employed as a retained expert. She represents in her report that her work at Integral Concepts, Inc. includes "help[ing] manufacturers implement designed experiments, statistical process control methods, and life testing to improve quality, reliability, and efficiency in manufacturing plants," and "help[ing] to design products with superior quality and reliability," as well as teaching courses in "Quality Control Methods, Reliability/Warranty Methods, Measurement System Assessment, Statistics/Data Analysis, Statistical Process Control, Designed Experimentation, Process Capability, Problem Solving, and Design for Six Sigma." Expert Report of Dr. Alice Wachs, ECF No. 182-1, PageID.8770. She "regularly [is] retain[ed] [by manufacturers] to forecast future warranty complaints and perform product reliability analyses to predict if, when and how products will fail in various environments." The defendant does not challenge her qualifications to opine about statistical methods as a general matter.

Dr. Wachs's report identifies voluminous materials that she considered including warranty and service data produced by the defendant, internal correspondence from GM relating to a years-long investigation of 8L transmission warranty problems, the lawsuit papers and testimony in this case, and information produced by individual plaintiffs in this case concerning their owned vehicles.

To arrive at her conclusions, first Dr. Wachs compiled the voluminous sales and warranty data produced by the defendant to classify and collate vehicle and service records by month of sale and month of repair, and also to exclude data about non-class vehicles. Dr. Wachs noted among her baseline assumptions that she “use[d] warranty claims data as a proxy for occurrence of the defect that Plaintiffs allege in this case,” and that “[i]n [her] opinion, a warranty claims rate is a conservative proxy for the actual occurrence of a problem, as not all drivers with a problem have their vehicles serviced under warranty, and not all dealers code their warranty repairs correctly.” *Id.* at 8777. She also noted that documents disclosed by the defendant indicated that “GM has also recognized that warranty claims may undercount the actual incidence of the problem.” *Ibid.* She also noted that GM’s internal documents indicated that the defendant assigns a “target” for warranty claims for its vehicles, expressed in terms of “Incidents Per Thousand Vehicles” or “IPTV,” which during the relevant time frame ranged from 4.9 to 9.8 IPTV. *Id.* at 8779. She also noted that GM disclosed an “occurrence framework” for “safety categorization” of defects in which an issue was identified as “less frequently” occurring between 2.0 and 9.0 IPTV, at a “high rate” between 30.1 and 110.0 IPTV, and at an “extremely high rate” over 111.0 IPTV. *Id.* at 8780. Dr. Wachs explained that, to put it in more common terms, GM classified a defect as occurring at a “high rate” when the return or service rate for a problem exceeded 3%, and at an “extremely high rate” with a return or service rate higher than 11.1%. *Ibid.*

Dr. Wachs’s report includes a discussion about general principles of quality and reliability forecasting via statistical methods, and she explained that a common method of forecasting product reliability is to determine, based on observed return or service rates, the probability that a product will fail within a forecasted service lifetime (e.g., forecasting that based on 97% of piston rings surviving for 150,000 miles of service, 3% are expected to fail within that same span). Dr. Wachs

explained that different statistical models may be used to estimate probability of product failure, and the method chosen may be subjected to conventional tests to determine if it reliably predicts failure rates based on available historical data. The statistical methods on which she settled for various class vehicle segments included the “Weibull,” “Gamma,” and “Logistic” analytical techniques.

Dr. Wachs analyzed the warranty data produced by GM and selected records relating to class vehicles subjected to service under a range of “service codes,” which she learned were used by GM to select service data for its internal study of the transmission problem. She noted that in her initial analysis each vehicle involved was counted once if it had any number of complaints for “shudder” issues, and once if it had any number of complaints for “hard shift” problems, and that if the vehicle exhibited both problems then it would be counted twice, indicating a degradation of the problem. However, she also performed a second analysis where each vehicle was counted once at most regardless of how many complaints it had for the same or different issues. *Id.* at 8793.

Dr. Wachs summarized her statistical findings in a table showing that warranty service rates among the various class models ranged from 4% to 10% within the first 12 months of service, and for all segments reached between 80-100% within 120 months in service. She concluded that these rates were “extreme” and greatly exceeded even the “extremely high” target for safety related defect occurrences assigned by GM. *Id.* at 8796. Dr. Wachs also noted that her predictive model forecasted similar (slightly lower) repair rates for the class vehicles compared with projections that had been produced internally by GM. *Id.* at 8798. Dr. Wachs extended her analysis further by breaking down “cumulative failure rates” for various class models month by month over the relevant time period to illustrate, based on the record of GM’s documented internal study of the

transmission problem over several years, what could be inferred that GM would have known about the severity and occurrence of the defect at different points in time. She determined, based on the high and consistently rising service rates, that GM knew at least by January 2017, both that the 8L-equipped vehicles had extremely high service rates, and that the options identified by GM for addressing the problem had failed to cure the issues. *Id.* at 8803.

Wachs also presented summary tables showing that among all class models, the historical proportion of problematic vehicles ranged from 5% to more than 20% for cars of the most recent class vintage (2019), and that the ongoing and forecasted problem rates escalated consistently for older models, ranging from 65-75% for most 2015 models, with the 2015 Chevrolet Corvette having the lowest rate of 37%. *Id.* at 8811. She also noted that the occurrence of problems was widely distributed across different jurisdictions, with the problem rate exceeding 10% of class vehicles in every involved state, ranging up to 30% in half of states. *Id.* at 8817.

Dr. Wachs finally summarized her findings as follows:

The Class Vehicles suffer from transmission problems that appear to manifest commonly as shudder and/or poor drive quality. Like the Class Representatives, many of the Class Vehicle owners required repeated servicing for both problems. This resulted in cumulative claims rates that were higher than the number of vehicles that went to get serviced (meaning there was more than one claim per vehicle), and in certain models eventually exceeded 100%. Since this information comes from GM's own warranty data, GM knew the magnitude of these cumulative claims rates for shudder and/or drive quality issues for any given month/year in any given month/year. GM also kept track of cumulative claims rates, and could have assessed the extent of the warranty impact at any point.

Expert Report of Dr. Alice Wachs at PageID.8821.

GM levels a variety of criticisms at the report and Dr. Wachs's opinions, many of which are directed to the assumptions she accepted and the data she considered. For example, GM disputes her use of the phrase "common issue," confounding its common meaning with the technical connotation found in Federal Rule of Civil Procedure 23. GM also faults the report as

overlooking significant variances in warranty repair rates between different class models and across different geographic regions. And GM believes that the opinions are not helpful at the class certification phase of the case because it questions the validity of using the data from “aggregated” warranty claims to compute the incidence of a presumed common defect in an individual vehicle.

These criticisms do not undermine the admissibility of the opinions. It is well settled, and has been so for decades, that under the permissive framework established by *Daubert* and Rule 702, “rejection of expert testimony is the exception, rather than the rule.” *Good v. BioLife Plasma Servs., L.P.*, 834 F. App’x 188, 198 (6th Cir. 2020) (quoting *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 530 (6th Cir. 2008); Fed. R. Evid. 702 Adv. Comm. Note to 2000 amends.). “The question on the table is whether a method can be ‘assessed for reliability,’ not whether it always gets it right. Disputes about the . . . accuracy of a theory’s results, generally speaking, provide grist for adversarial examination, not grounds for exclusion.” *Gissantaner*, 990 F.3d at 464 (cleaned up). Challenges to the relevance and reliability of expert testimony merely prompt the Court to engage in a “preliminary inquiry as to whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology properly can be applied to the facts in issue.” *Dilts v. United Grp. Servs., LLC*, 500 F. App’x 440, 445 (6th Cir. 2012) (quoting *Conwood Co., L.P. v. U.S. Tobacco Co.*, 290 F.3d 768, 792 (6th Cir. 2002)). “[I]t is not the role of the trial court to evaluate the correctness of facts underlying one expert’s testimony.” *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1392 (Fed. Cir. 2003). “[T]he Advisory Committee note to Rule 702 is instructive in this regard: ‘When facts are in dispute, experts sometimes reach different conclusions based on competing versions of the facts. The emphasis in the amendment on “sufficient facts or data” is not intended to authorize a trial

court to exclude an expert's testimony on the ground that the court believes one version of the facts and not the other." *Ibid.* "Indeed, as the Supreme Court stated in *Daubert*: '*Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.*'" *Ibid.* (emphasis added; quoting 509 U.S. at 595).

Nothing in GM's presentation establishes such exceptional circumstances that the wholesale exclusion of Wachs's opinion testimony is warranted under Rule 702.

GM does not generally challenge the validity of the various statistical methods espoused by Dr. Wachs or their acceptability among statisticians in her field. All of its criticisms about the applications of those accepted methods to the data that she reviewed bear on the weight and not the admissibility of her opinion. Once again, bearing in mind Rule 702's liberal standard, which favors admissibility as the norm, GM has not shown that there are any such egregious defects in the analysis as to warrant exclusion.

The opinions expressed in the report also are substantiated by an ample factual basis, most of which comprises data that was produced by GM itself. All the information Dr. Wachs used in her analysis was disclosed in her report, and GM has not pointed to any plainly egregious errors or misrepresentations in the application of the methods she selected to analyze the data. Dr. Wachs also has given plausible explanations for why she chose to include, omit, or combine various types of data points. Her analytical criteria may be subject to fair criticism, but that does not render her testimony inadmissible. *Eimers v. Lindsay Corp.*, No. 19-44, 2021 WL 5647993, at *21 (E.D. Tenn. Dec. 1, 2021) (holding that "criticisms pertain[ing] to credibility and accuracy, not reliability and relevance, because they take issue with the kinds of data points selected rather than the methodology or empirical basis," do not justify exclusion of an expert's opinion) (citing *In re*

Scrap Metal Antitrust Litig., 527 F.3d 517, at 529-530 (6th Cir. 2008)). “[A]lthough the opinions of the proffered testimony may very well be shaky, because the opinions were based upon facts in the record, and were not assumptions or guesses, [the] challenges merely [go] to the accuracy of the conclusions, not to the reliability of the testimony.” *In re Scrap Metal Antitrust Litig.*, 527 F.3d at 530 (quotations omitted). Wachs sufficiently has linked her expressed opinions to the factual basis disclosed.

GM also criticizes Dr. Wachs’s reliance on “assumed facts,” principally her assumption that there exists a common or root cause defect in the 8L transmissions that creates both “shudder” and “hard shift” issues. GM also finds fault with her inferences about “future repair rates” derived from past service rates, deeming them invalid because Dr. Wachs admitted that the data set she used was not “homogenous” in certain respects because the “warranty codes” used by GM service departments when addressing transmission complaints changed over time. The gist of her testimony, however, is not directed to establishing conclusively the precise engineering nature of the alleged defect. Moreover, there is evidence in the record suggesting directly that GM itself identified a “root cause” of the transmission problems stemming from difficulties with the frictional interface in the “torque converter clutch” (“TCC”) assembly. GM’s own study of warranty complaints for the 8L transmission models characterized them as having a “root cause” issue that was determined to be a “trigger” for various systemic failures and symptomatic complaints about the transmissions. Dr. Wachs’s testimony, to the extent it is relevant at this stage of the case, appears to be directed at providing statistical back up for the conclusion, which is suggested by other direct evidence, that there is a widespread, commonly recurring defect in the 8L transmission design, which produced customer problems at a remarkably high rate, and that GM knew for years that the defect existed, even as it continued selling the flawed models.

There is ample support in the record for Wachs’s assumption that a unitary common flaw caused both “shudder” and “hard shift” issues in the class vehicles. “An expert’s opinion, where based on assumed facts, must find some support for those assumptions in the record. However, mere ‘weaknesses in the factual basis of an expert witness’ opinion . . . bear on the weight of the evidence rather than on its admissibility.” *McLean v. 988011 Ontario, Ltd.*, 224 F.3d 797, 801 (6th Cir. 2000) (quoting *United States v. L.E. Cooke Co.*, 991 F.2d 336, 342 (6th Cir. 1993)).

The record here certainly provides “some support” for her assumption. First, in GM’s internal correspondence from 2018, a writer involved with the investigation of the transmission warranty problems readily characterized both “shudder” and “hard shift” (a.k.a. “TCC control”) as being positively associated and commonly occurring in problematic vehicles. Email dated Apr. 26, 2018, ECF No. 201-6, PageID.10821 (“*We repeatedly observed that shuddering vehicle returns had bad TCC control and bad feeling shifts. . . . In many recent meetings, the TCC integration team . . . have been postulating that the benefits of positive friction curves should extend beyond shudder robustness to also improve both TCC control and shifting control. We have been offering this advice in part because the shuddering vehicles we have been testing generally have horrible TCC control and horrible shift feel / shift control — a consistent observation from multiple parties over a 3 year investigation.*”); *see also* Email dated Jan. 23, 2017, ECF No. 201-5, PageID.10817 (“I’m pretty sure the glazing [of the friction surface] is occurring *as a result of shudder and loss of control.*”) (emphases added). Second, in a GM internal slide presentation from October 2017, the defendant also characterized the issue as “A Recurring Problem” affecting all rear-wheel-drive models using the 8L45 and 8L90 transmissions — notably also concluding that “*TCC shudder/control is the fuse for many types of system integration failures.*” Presentation dated Oct. 2017, ECF No. 201-13, PageID.10963 (emphasis added). The same presentation also

included a timeline indicating that through “warranty data analytics” GM had identified the “root cause” of the problem by “Fall of 2017, 2 years into 8-speed shudder investigation.” *Id.* at 10965. That is sufficient grounding for the assumption that a common defect existed, and Dr. Wachs’s analysis was directed at exploring whether a wholesale statistical analysis of warranty complaint and service records could provide statistical backup for a finding that a common defect exists.

GM also argues that Dr. Wachs’s opinion that defect rates were “remarkably high” in the class vehicles is “unfounded.” But she testified that her opinion was based on decades of experience analyzing automobile warranty issues and defect claims, during which she had never encountered defect rates as high as she found in the class models here. Alice Wachs dep., ECF No. 201-4, PageID.10798-99 (“Q. So you don’t have an acceptable rate. You just believe that the rates that you are looking at here are high? A. So, I mean, I’ve been analyzing reliability and warranty data for decades. And I don’t think I’ve ever seen values this high in my career. This is, in my experience, incredibly high, in my experience. However, that might not be so relevant. What is relevant is for sure they far exceeded General Motors’ own metrics for what is considered acceptable or not.”). That opinion sufficiently is grounded in Dr. Wachs’s decades of experience in the relevant field of analysis.

GM also quibbles with purported “errors” in the transcription or collation of data in Dr. Wachs’s report. However, as the plaintiffs point out, several of those criticisms are simply off base and unsupported by the record. The remainder concern trivialities such as the possible inclusion of a fractional percentage of non-class vehicles in some parts of the analysis. “Rule 702 does not require unstinting perfection in presenting test results,” and such immaterial scrivener’s errors as transcribing “4.0%” into “4.2%” in featured tables of the report are not so serious that they warrant wholesale disregard by the Court of an expert’s entire work product. *Gissantaner*,

990 F.3d at 469. Moreover, “minor flaw[s] in an expert’s reasoning or a slight modification of an otherwise reliable method will not render an expert’s opinion *per se* inadmissible.” *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002) (noting that the Court ““should only exclude the evidence if the flaw is large enough that the expert lacks “good grounds” for his or her conclusions””) (quoting *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 746 (3d Cir. 1994)). “This limitation on when evidence should be excluded accords with the liberal admissibility standards of the federal rules and recognizes that our adversary system provides the necessary tools for challenging reliable, albeit debatable, expert testimony.” *Ibid.* The Court “frequently should find an expert’s methodology helpful even when the judge thinks that the expert’s technique has flaws sufficient to render the conclusions inaccurate.” *In re Paoli*, 35 F.3d at 744-45. The flaws here are not so glaring as to justify exclusion.

GM cites *Grodzitsky v. American Honda Motor Co.*, No. 12-1142, 2015 WL 2208184 (C.D. Cal. Apr. 22, 2015), as an instance where Dr. Wachs’s work was “questioned” by the court in another product defect case. But the court in that case expressly declined to pass on the admissibility of Dr. Wachs’s opinions, and the decision is unhelpful here. *Id.* at *11 n.12 (where the court “assum[ed] that Wachs’s opinions are admissible,” but found that “they are insufficient to prove a common defect”).

Finally, GM’s argument that Dr. Wachs’s testimony must be excluded because she disclaimed any views on whether the defect implicated the “safety” of the class models misses the mark entirely. There is no authority for the proposition that an expert must opine on every issue in a case in order to supply an admissible opinion on other topics. *Dilts v. United Grp. Servs., LLC*, 500 F. App’x 440, 446 (6th Cir. 2012) (“*Daubert* and Rule 702 require only that the expert testimony be derived from inferences based on a scientific method and that those inferences be

derived from the facts on the case at hand . . . not that they know the answer to all the questions a case presents — even to the most fundamental questions.”) (quoting *Jahn v. Equine Servs., PSC*, 233 F.3d 382, 390 (6th Cir. 2000)).

GM has not identified sufficient reasons for excluding Dr. Wachs’s opinions.

D. William McVea

Dr. William McVea is the Principal Engineer and President of KBE, Inc., in Syracuse, New York, a position which he has held since 1997. He was engaged by the plaintiffs “to determine if the design and/or architecture [of the defendant’s 8L transmissions] had a common defect causing NVH (Noise Vibration Harshness) or handling issues including in lower gears, surging, lurching, jerking, lunging, rough coast downs, and at higher gears, shuddering or shaking at steady state speeds.” Expert Report of Dr. William McVea, ECF No. 180-1, PageID.8298.

Dr. McVea holds a bachelor’s degree in Mechanical Engineering from the Rochester Institute of Technology and a Ph.D. in Agricultural Engineering from Purdue University. His career spans more than 40 years as a practicing engineer in industry and academia. From 1999 through 2010 he held teaching positions as a professor or adjunct professor at SUNY College of Technology in Delhi, New York, Purdue University in West Lafayette, Indiana, and Rochester Institute of Technology in Rochester, New York. He has worked professionally as a “Consulting Engineer in Vehicle Dynamics,” design engineer, mechanical test and development engineer, and code engineer with several large manufacturing companies including Clark Equipment, Gleason Systems, and Fairfield Manufacturing Corporation. He describes KBE, Inc. as an engineering consulting firm principally occupied with “development of gear trains and power transmission devices.” He has been a licensed professional engineer since 1990.

Dr. McVea's report indicates that his engineering work has "focused on mechanical power transmission (e.g. manual and automatic transmission design and development for both automotive and non-automotive systems, traction aiding differential systems, engine design, axle design, gear design, development, analysis, etc.)," and that he has engaged in "additional studies specific to gear technology and NVH (Noise, Vibration and Harshness) [] in conjunction with OSU (Ohio State University) AGMA (American Gear Manufacturers Association), [and] SAE International (Society of Automotive Engineers)." Expert Report of Dr. William McVea, ECF No. 180-1, PageID.8295. His past work includes design of five different transaxle units, designing and testing of three torque converters, and work on reverse engineering multiple existing transmission designs. *Id.* at 8296. He also has worked with "multiple manufacturers" to improve the qualities of their automatic transmission fluid products. *Id.* at 8297. His work also has included multiple engagements specifically concerned with design and refinement of transmission components to reduce noise, vibration, and harshness ("NVH"). *Id.* at 8296-97. He also holds multiple patents for power transmission systems in automotive applications. *Id.* at 8297.

The defendant does not challenge Dr. McVea's qualifications generally to opine on topics of mechanical engineering, but it does dispute whether he has relevant expertise to opine on matters concerning "vehicle safety" or "customer communication" about vehicle defects.

Dr. McVea states in his report that he reviewed numerous materials during his analysis, including "GM documents and test data," "NHTSA complaints," "GM's inspections of the Plaintiffs' vehicles," "testimony of witnesses," "GM's warranty data, summed up by Plaintiffs' expert [Alice Wachs]," and "[his] own inspections of Plaintiffs' vehicles, where possible." *Id.* at 8298. He also inspected and test drove many of the named plaintiffs' vehicles, and during his inspections he verified the "hard shift" and "shudder" problems about which most of the drivers

complained. *Id.* at 8337-43. He also reviewed reports of GM's inspections of the plaintiffs' vehicles, including data recorded by in-car accelerometers employed for the inspections, which verified the vibration and abrupt movement. *Id.* at 8346-47. Finally, Dr. McVea also disassembled four 8L transmissions supplied by GM (which, apparently, were removed from class vehicles), and he found that "[t]he friction material had been adversely affected [by] the ATF and caused debris in the filter," and the "ATF had burnt and oxidized," corroborating his assessment that degradation of the materials had occurred, resulting in excessive slippage and heat. *Id.* at 8348. Dr. McVea noted that "no other observed sources for this [degradation]" were evident, and that other components "(bearings, seals, valve body, etc.) were fine." *Ibid.*

GM's attack on Dr. McVea's opinions comes on two fronts. First, GM contends that the opinions must be stricken in their entirety because of "discovery misconduct" consisting of "*ex parte*" vehicle inspections McVea conducted without GM's representatives present, his failure to record or otherwise document certain inspections, his use of an inspection protocol with which GM disagrees, and his implementation of certain software tools made by GM and others.

The record does not back up these arguments and they must be rejected. GM's entire presentation of its allegations of supposed "discovery misconduct" is disingenuous and inapposite to any issues presently before the Court. The terms of the "inspection protocol" executed by the parties expressly governed instances in which it was anticipated that *the defendant* would request vehicle inspections. That protocol begins with the following statement: "*Upon notice by Defendant ('GM') of its intent to conduct a private inspection of any Subject Vehicles, counsel for Plaintiffs shall provide three dates on which the Subject Vehicle shall be available for inspection.*" Discovery Protocol Agreement dated Jan. 1, 2020, ECN 178-2, PID 7535 (emphasis added). That language plainly expressed the parties' intent to set terms for *the defendant's inspections* of the

plaintiffs' vehicles, which, unsurprisingly, embodied some negotiated requirements regarding reasonable notice, handling of vehicles during the inspections, and responsibility for any damage. Nothing in the "inspection protocol" remotely suggests that either party intended its terms to bind the plaintiffs regarding *inspection of their own vehicles* by their experts or counsel.

Moreover, further correspondence from GM's counsel plainly indicates that the defense team was aware of and expressly contemplated the likelihood that the plaintiffs would have their vehicles inspected at their own initiative, and the defense team represented merely that it was "likely" that if the plaintiffs did so, then GM also would request an opportunity to make its own inspections:

We do not understand your repeated entreaties to inspect every vehicle on an artificial schedule you dictate. The Court has not yet ruled on GM's motion to dismiss. It is premature to schedule wholesale vehicle inspections. Plaintiffs have not responded to GM's discovery requests, and a discovery schedule is not yet in place. *We will schedule vehicle inspections in accordance with the protocol we entered, but we will not abide by your arbitrary "deadlines."* As a compromise, *if you represent, with respect to a specific plaintiff who wants to sell or otherwise dispose of a vehicle, that you have conducted an inspection of that vehicle, GM will likely also elect to do so.*

Letter dated Feb. 27, 2022, ECN 178-3, PID 7543 (emphasis added). The defendant's position that it was somehow deceptive or improper for plaintiffs to have their own vehicles inspected by their retained expert at times and dates and by means of their choosing is belied by the record, and the insinuation that this constituted "misconduct" by plaintiffs' counsel is, frankly, false.

GM has cited no legal authority for the proposition that a retained expert is barred from inspecting *his client's own property* at the client's initiative outside the presence of opposing parties or their counsel. Of course, it is undisputed that all information relied upon by an expert in formulating his opinion must be disclosed along with his report, including, if any information or data is memorialized, any such materials that the expert later relied upon to inform his analysis.

But it is also undisputed that all of the information recorded by Dr. McVea *was* disclosed to the defense along with the expert's report.

GM argues that the inspection records appear to be incomplete or to omit certain information about some vehicles. But, as noted above, that is a matter to be explored on cross-examination, and such arguments implicate the soundness of the factual basis underlying the opinion, not the admissibility of the expert's testimony. *McLean*, 224 F.3d at 801.

Moreover, as this Court has observed in other cases, there is no authority for the remarkable proposition that a party violates any discovery rule by engaging in the ordinary business of examining *its own property* in order to gather evidence to support its case. Informal investigation by a party and its counsel and experts is part and parcel of working up any case for trial, and nothing in the Federal Rules of Civil Procedure prohibits that routine work up of a case. *Cf. Thomas v. 1156729 Ontario Inc.*, 979 F. Supp. 2d 780, 786 (E.D. Mich. 2013) (“[A] normal component of informal discovery is the attempt to obtain a written statement from the witness, which can serve a multitude of purposes later at trial. ‘Witness interviews, conducted in private, are routine components of nearly every attorney’s case preparation.’ ‘Unless impeded by privilege an adversary may inquire, in advance of trial, by any lawful manner to learn what any witness knows.’”) (quoting *In re Am. Med. Sys., Inc. Pelvic Repair Sys. Prod. Liab. Litig.*, 946 F. Supp. 2d 512, 514 (S.D. W.Va. 2013); *Doe v. Eli Lilly & Co., Inc.*, 99 F.R.D. 126, 128 (D.D.C. 1983)).

Of course, parties may, and often do, choose to invite the presence of opposing counsel during expert inspections to foreclose any claims of impropriety. But nothing in the federal rules mandates that courtesy. In this case, the defense team plainly was aware that the plaintiffs could, and would, undertake inspections of their own vehicles, at their own initiative. Moreover, the correspondence shows that despite receiving notice of some of those inspections, defense counsel

declined to attend on the ground that they were unwilling to incur the expense of doing so while dispositive motions were pending. The defense cannot now complain that it was “excluded” from inspections about which it was fully aware and which it simply decided to ignore.

GM’s second line of attack focuses on the facts Dr. McVea relied on to reach his conclusions and his qualifications for opining on issues of safety and consumer reaction to the transmission defects. However, the substance of Dr. McVea’s report amply discloses a sufficient factual basis for all of his opinions and his qualifications to render them.

It is undisputed that McVea has extensive experience and education as an engineer who has worked for decades in various areas of mechanical engineering and automotive design, including, as relevant here, special expertise in the design and refinement of transmission and drivetrain systems, which encompasses techniques to mitigate noise, vibration, and harshness in operation. That expertise certainly qualifies him to opine both about the root cause of the shudder and hard shift issues, and about potential causes of them.

And the report amply documents the extensive factual basis of the opinions, which included review of (1) GM internal correspondence discussing the complaints by the defendant’s own vehicle testers and, later, its customers, (2) publicly lodged customer complaints about shudder and hard shifting problems, (3) further GM correspondence demonstrating the defendant’s own knowledge of and determinations about the “root cause” of the issues, (4) results of inspections of the plaintiffs’ vehicles and road tests to verify the occurrence of the complained of issues, (5) the warranty service data summary produced by the plaintiffs’ fellow expert Dr. Wachs, (6) service records of the plaintiffs’ own vehicles, all of which previously were submitted to GM for transmission repairs under warranty, (7) GM’s inspections of the vehicles, including accelerometer data confirming the occurrence of shudder and harsh shifts during test drives, and (8) the results

of Dr. McVea's own disassembly and inspection of exemplar transmissions supplied by GM to confirm his hypothesis that poor selection of ATF and friction material resulted in degradation of vital TCC components. Dr. McVea also relied on further GM correspondence documenting the success (or lack thereof) achieved by attempted solutions to the shudder and hard shift issues, and he proposed that several known effective solutions could be implemented to cure the inevitable problems that could be expected to arise in all of the class vehicles. GM's own correspondence backs up his opinion that the problems were "inevitable" and that it is "only a matter of time" before all class vehicles would experience them.

GM quibbles with the thoroughness and appropriateness of Dr. McVea's inspection techniques, and it faults him for inspecting (or documenting his inspection of) only some of the plaintiffs' vehicles and not all of them. Those matters, of course, are appropriately explored on cross-examination questioning the soundness of the factual basis for his opinion. The defendant has not shown that the opinion is so devoid of factual backup as to be entirely speculative or unfounded.

GM also insists that Dr. McVea lacks particular "expertise" in "customer communications" or "vehicle safety" necessary for him to opine about the impact of the alleged defect on driver safety or the proper means for a manufacturer to notify customers of the defect. But it does not take any specific specialized expertise for an expert in drivetrain design to opine about the obvious safety implications of a transmission defect that causes such severe misbehaviors as a three-second delay engaging from neutral into drive, or "lurching" of a vehicle that causes it to dislodge from a test setup and collide with nearby objects. *See Zuzula v. ABB Power T&D Co.*, 267 F. Supp. 2d 703, 714 (E.D. Mich. 2003) (finding sufficient that the expert arrived at his conclusions "by the

application of general electrical and mechanical engineering principles, together with his conclusions which flowed from his investigation of the facts of the accident”).

Moreover, Dr. McVea’s opinion concerning potential solutions does not, contrary to GM’s position, prescribe any particularized means or timeline for it to notify customers about the transmission problems and its potential solutions. Instead, he merely posits, based on his review of the conclusions and recommendations by GM’s own engineers, as well as his consideration of the warranty service rate statistics produced by Alice Wachs, that it is clear that the problems are pervasive in the class vehicles (inherent to poor design choices in the selection of ATF and friction materials), inevitably will occur in all class vehicles over time, and can be solved by readily available and already identified fixes proposed by GM’s engineers, including fluid changes and replacement of parts and software which have been developed to prevent the same issues in the next iteration of the 8L design. Those assessments are all well within the wheelhouse of a skilled mechanical engineer with decades of experience in drivetrain design, including the application of techniques to mitigate the sort of issues that the plaintiffs in this case complain about with their vehicles.

Finally, GM insists that Dr. McVea had “no methodology” for evaluating the alleged defects in the transmissions. That critique is based on a laundry list of asserted deficiencies in his vehicle inspections. The defendant says that not all vehicles were inspected, only subjective evaluations were done on those that were inspected, instrumentation was not used or in some cases misused, and for inspections that were done and where instruments were used only incomplete documentation of the inspections was produced. Although that criticism may prompt concern in some cases where a defect is grounded on a consumer’s subjective perception of how a product reacts to certain user inputs, that is not so here, where the defect is purely mechanical in nature

and is not (allegedly) impacted by the manner of use by the driver. Here, it is possible to observe the existence of the defect directly by applying ordinary engineering principles and methods such as disassembly and inspection. Moreover, no attempt was made or postulated by Dr. McVea to demonstrate the existence of a problem through a systematic survey of vehicles.

Dr. McVea’s “method” was simply the scientific method, which is the most basic and widely recognized reliable “method” for deriving any scientific conclusion. *Daubert*, 509 U.S. at 590 (“The adjective ‘scientific’ implies a grounding in the methods and procedures of science. Similarly, the word ‘knowledge’ connotes more than subjective belief or unsupported speculation. The term applies to any body of known facts or to any body of ideas inferred from such facts or accepted as truths on good grounds. Of course, it would be unreasonable to conclude that the subject of scientific testimony must be ‘known’ to a certainty; arguably, there are no certainties in science. But, in order to qualify as ‘scientific knowledge,’ an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation — i.e., ‘good grounds,’ based on what is known.”) (cleaned up); *see also Sardis v. Overhead Door Corp.*, 10 F.4th 268, 291 (4th Cir. 2021) (“Dr. Singh’s opinions, as far as they go, are ‘scientific’ in nature. They raise basic, testable engineering concepts governing how an object will perform when subjected to certain forces.”) (citing Fed. R. Evid. 702; *Daubert*, 509 U.S. at 590).

“A hypothesis is appropriately tested under the scientific method by comparing all known facts, acquired data (of which physical test results is but a part), and the developed body of scientific knowledge to the hypothesis.” *Allstate Indem. Co. v. Dixon*, 932 F.3d 696, 701 (8th Cir. 2019). In other words, the scientific method requires an expert to (1) gather information, (2) formulate a hypothesis, and (3) test the hypothesis by checking to see if his observations are consistent with what it predicts. Dr. McVea did just that when he (1) read engineering design and

troubleshooting records concerning the transmissions, (2) applied well known principles of mechanical engineering to formulate a hypothesis that the shudder and hard shift problems could be caused by an inappropriate selection of ATF and friction material, and (3) verified his hypothesis through numerous observations, including disassembling example transmissions to see if they showed signs of problems caused such an inappropriate combination, test driving vehicles to see if they exhibited behavior consistent with friction system problems, and reviewing other sources of information (warranty service records and NHTSA reports) to see if reports of similarly characteristic issues were widespread.

GM took a different approach of systematically testing all the plaintiffs' vehicles in an attempt to develop evidence that *none of them* (or only a handful of them) had any transmission problems, or that the problems observed were variegated and disparate. Dr. McVea also looked at those results and says that they did, in fact, provide further proof that his hypothesis is correct. GM faults him mainly for not undertaking the same sort of study according to the same protocol, but that does not mean that there is "no methodology" in what he did, merely because he took a different approach to the problem.

Dr. McVea's opinions are admissible under prevailing Rule 702 jurisprudence.

IV. Plaintiffs' Motions

A. David Hartfelder

David Hartfelder is GM's Systems Safety Director. The defendant proposes to have him testify about how GM evaluated the defects in the "subject transmissions regarding personal injury, property damage, or safety risks." The plaintiffs' main complaint is that Hartfelder never furnished a full report required by Rule 26(a)(2)(B). Instead, defense counsel summarized Hartfelder's proposed testimony and the factual basis as permitted by Rule 26(a)(2)(C).

At his deposition, Hartfelder “testified generally [about] the Safety Field Investigation (‘SFI’) process discussing several Open Investigation Review (‘OIR’) reports produced the day before his September 2, 2021 deposition.” During the deposition, GM introduced a 28-page PowerPoint slide deck that collated information about a number of investigations GM undertook in response to reports of transmission problems. The plaintiffs do not object to Hartfelder’s testimony in general or the use of the preliminary portions of the slide deck as documentary evidence. However, they object to any testimony by him about slides 8 through 22 of the presentation, which they say comprise a “reanalysis” of safety metrics and target defect rates for the class transmissions. They say that the “reanalysis” was undertaken by Hartfelder’s subordinates at his direction only after he was designated as a Rule 30(b)(6) witness. According to Hartfelder, this “reanalysis” of the risks of the transmission design was performed to “validate[] what we did . . . to launch those products.” In the defendant’s expert disclosures, served in December 2021, GM identified Hartfelder as a non-retained expert who would testify on several topics. The plaintiffs do not object to the disclosure of Hartfelder’s testimony on most of the identified topics. However, they now seek to preclude him from testifying that the analysis reflected in Exhibit 578, which is the portion of the slide presentation mentioned above, “utilizes objective hazard metrics to confirm that the original safety cases for the at-issue vehicles were robust and validates the conclusions of GM’s investigations.”

The crux of the plaintiffs’ argument is based on characterizing Hartfelder as an expert that falls within the scope of Rule 26(a)(2)(B), and therefore one for which a full report is required. They say Hartfelder fits that role because his reanalysis was not “part of his regular work” because he directed his subordinates to prepare it only after the litigation commenced, and after he was designated as a Rule 30(b)(6) witness, and the conclusions stated in the reanalysis are not grounded

in Hartfelder's personal experience and observations, because he admitted that the work was produced by others, and that he did not even understand some of the scoring used.

The argument is a nonstarter. The plaintiffs have not identified any decisions supporting their novel argument that an employee of the defendant designated as a Rule 30(b)(6) witness transforms into a "retained expert" merely because he (or his staff) undertakes an investigation of facts related to litigation while preparing for his deposition. The context clearly shows that Hartfelder was not retained or specially employed for the purpose of this litigation, and the topics on which he proposes to testify are within the ambit of his experiential expertise as the Systems Safety Director for the defendant.

"Since the 2010 amendment, courts have attempted to parse the distinction between experts who are subject to the report requirements of Rule 26(a)(2)(B) and those subject to the less burdensome disclosure requirements of Rule 26(a)(2)(C)." *Deere & Co. v. FIMCO Inc.*, 239 F. Supp. 3d 964, 979 (W.D. Ky. 2017). Some courts have elucidated the distinction as follows: "In order to give the phrase 'retained or specially employed' any real meaning, a court must acknowledge the difference between a percipient witness who happens to be an expert and an expert who without prior knowledge of the facts giving rise to litigation is recruited to provide expert opinion testimony. It is this difference, we think, that best informs the language of the rule." *Mem'l Hall Museum, Inc. v. Cunningham*, 455 F. Supp. 3d 347, 363 (W.D. Ky. 2020) (quoting *Deere*, 239 F. Supp. 3d at 980). "On the other hand, a retained expert 'comes to the case as a stranger and draws the opinion from facts supplied by others, in preparation for trial, he reasonably can be viewed as retained or specially employed for that purpose, within the purview of Rule 26(a)(2)(B).'" *Ibid.*

It is clear from the record that Hartfelder did not come to the case “as a stranger,” and it is undisputed that his work done in September 2021 to “reanalyze” data compiled by GM about transmission issues lined up with similar work previously undertaken by Hartfelder’s division on numerous prior occasions, both in relation to this litigation and other issues relating to non-class vehicles. There is no dispute that Hartfelder has relevant personal knowledge of work that GM has done over a range of years during and following the launch of the class vehicles to review the numerous complaints about their transmissions.

The plaintiffs have not mounted any challenge to Hartfelder’s expertise generally to discuss how GM reviews safety issues, how it establishes target incident and defect rates, what those rates are, and whether (or at what point) the class vehicles encountered problems at rates exceeding GM’s targets. It is well settled, and this Court previously has held, that a person with intimate knowledge of a business process is permitted to offer testimony explaining the proprietary peculiarities, jargon, and course of dealings under those processes. *E.g.*, *Cahoo v. Fast Enterprises LLC*, No. 17-10657, 2021 WL 1037727, at *7 (E.D. Mich. Mar. 18, 2021) (allowing the defendants’ employees — individuals with special knowledge and experience with the defendants’ systems under scrutiny — to provide opinions and insight about the operational and management functions of those systems); *see also United States v. Johnson*, 488 F.3d 690, 698 (6th Cir. 2007) (“There are innumerable trades and practices that employ their unique devices, feints, and codes that may mean nothing to the untrained observer but may speak volumes to a maven qualified by experience or training.”); *Davis v. Echo Valley Condo. Ass’n*, 349 F. Supp. 3d 645, 655 (E.D. Mich. 2018), *aff’d*, 945 F.3d 483 (6th Cir. 2019) (“[T]he defendants satisfied their disclosure obligation under Rule 26(a)(2)(C) when they filed their expert witness list [which explained that

the witness, who installed the HVAC system at issue] will testify to the condition of the HVAC system located in [the plaintiff's] and neighboring units.”).

For their argument, the plaintiffs mainly rely on *Ulbrick v. UPR Products, Inc.* But that case is inapposite because there the record showed that the proposed expert — a mechanic and “racing buddy” known to the father of the decedent — had no personal knowledge about a fatal racing accident or the construction of the race car involved, and he was engaged only after the accident to deconstruct the vehicle and attempt to discern the cause of the crash. *Ulbrick v. UPR Prod., Inc.*, No. 08-13764, 2011 WL 500034, at *1 (E.D. Mich. Feb. 8, 2011). That decision is unhelpful here, where the plaintiffs challenge the opinion testimony by the defendant’s employee whose work regularly involves the same type of warranty data analysis about which he proposes to testify in this case.

Hartfelder’s proposal to offer the challenged opinion did not trigger any heightened disclosure requirement under Rule 26(a)(2)(B). He is a non-retained expert for whom only summary disclosures under Rule 26(a)(2)(C) were required. It is undisputed that a summary disclosure was produced timely. The proposed testimony is comfortably within Hartfelder’s area of expertise, and the plaintiffs do not plausibly argue otherwise. The motion to exclude his testimony will be denied.

B. Robert Lange

According to his CV, Robert Lange has more than 50 years of experience as an automotive engineer. Robert Lange CV, ECF No. 203-6, PageID.11439. GM proposes to elicit testimony from him that the majority (between 60 and 95%) of class vehicles in different segments never have been presented for warranty service for “harsh shift” issues, between 40 and 80% of class models sold never have been submitted for warranty service for “shudder” issues, and among

different models and geographic regions, the occurrence of warranty complaints about both issues is highly variable, such that the data suggest that the complaints are caused by other issues, not by a common inherent design defect. Expert Report of Robert Lange, ECF No. 177-2, PageID.7084-93.

Lange holds undergraduate and master's degrees in mechanical engineering from the University of Michigan. From 1994 to 2008, he was the Executive-in-Charge, Engineering Director, and Executive Director of the Vehicle Structure and Safety Integration division of GM. Before that, he worked for 25 years as an engineer, principal engineer, supervisor, and vice president at Ford Motor Company and Failure Analysis Associates. His work as an engineer spans numerous areas of automotive design including vehicle safety, vehicle dynamics, consumer metrics, and defect investigation. His CV lists numerous publications including studies of crash statistics using vehicle crash notification data, evaluation of crash worthiness using field performance data, and examinations of risk of fatal rollover accident risk vs. performance of vehicles on government safety tests.

The plaintiffs do not challenge Lange's qualifications generally to opine on topics of vehicle design or engineering analysis of the causation and nature of transmission design defects. However, they argue that (1) Lange is unqualified to opine about any topics in statistical analysis because his education is in engineering, he is "not a statistician," and he "holds no degrees in statistics or mathematics," (2) Lange did not "do the work" of warranty records statistical analysis, which was assigned to GM's fellow expert on whom he relies (Dr. Robert Brown), he did not have the expertise to check that the work was done correctly, and he cannot vouch for the reliability of the methods employed, (3) Dr. Brown was not disclosed as an expert witness for the defendant, so he cannot independently testify about the reliability of his work, and (4) in any event, Lange's

testimony about statistical analysis is duplicative of testimony that will be offered by another defense expert, Dr. Rose Ray (whose testimony has not been challenged), and it therefore should be excluded as cumulative under Evidence Rule 403.

The defendant points out that Lange is qualified to apply statistical methods to “engineering problems” such as analyzing the root cause and commonality of occurrence of a product defect, because his engineering education included training in advanced mathematics, and he employed statistical methods in his work over decades as an automotive engineer, which frequently required him to perform the same sorts of warranty data analysis discussed in his testimony in this case. That should raise no eyebrows. It is scarcely debatable that contemporary undergraduate and graduate education in engineering universally includes some training in the use of advanced mathematics, including statistical methods. Lange’s background in the application of statistical methods also is substantiated by his numerous published studies concerning statistical analyses of safety aspects of automotive design.

Moreover, at his deposition, Lange specifically testified that when he worked for Ford Motor Company, one of his principal responsibilities was to receive and analyze warranty service data for Ford vehicles on a monthly basis. Robert Lange dep., ECF No. 203-5, PageID.11423. He also testified that his work at Exponent and Failure Analysis Associates also involved “warranty data analysis.” *Id.* at 11424. Lange further testified that he specified the statistical analysis of warranty data that he wanted Dr. Brown to perform, and that after the data was produced to his specifications, he assigned another statistician the task of verifying that the work was free of errors. *Id.* at 11428, 1129-31.

The record establishes that Lange is qualified sufficiently by his extensive engineering background, including specific experience with automotive warranty service analysis, to opine

about the significance of statistical data developed from warranty service records, and the application of that data to identifying the existence, cause, and remedies for automotive system defects. Moreover, the plaintiffs have not shown that any of the data relied upon in Lange's report is not the type of statistical information typically employed by engineers analyzing problems in vehicle design and defect identification and remediation. Certainly, the record presented to date, along with Lange's own testimony, sufficiently establishes that the type of warranty analysis that accompanies Lange's report is the same sort of information that Lange relied upon in his past work, and the same type of information that repeatedly was compiled and reviewed by GM's own engineers throughout years of investigation of the 8L transmission design issues.

GM also represents that Lange's testimony will not be cumulative of anything Dr. Ray intends to testify about, since Dr. Ray will not opine about the existence or frequency of the transmission defect, but instead will devote her testimony to criticism of the specific statistical methods employed by the plaintiffs' experts.

Lange is qualified by his experience and training to opine on the use of warranty service data analysis as it pertains to the identification and classification of vehicle defects. The plaintiffs have not shown that any information underlying his report is beyond the realm of the types of information usually relied upon by engineers in his field. His testimony is not cumulative of that to be offered by other witnesses. The plaintiffs' motion to limit his testimony will be denied.

V. Conclusion

For the reasons stated above, the proponents of their respective expert witnesses have established the foundational requirements for admission of their opinion testimony under Evidence Rule 702 and the cases that construe that rule.

Accordingly, it is **ORDERED** that the defendant's motions to exclude or strike the reports and opinions of Samantha Iyengar (ECF No. 170), Richard Eichmann (ECF Nos. 172, 179), Alice Wachs (ECF No. 175), and William McVea (ECF No. 178), and the plaintiffs' motions to exclude or strike the reports and opinions of David Hartfelder (ECF No. 173, 174), and Robert Lange (ECF No. 176, 177) are **DENIED**.

s/David M. Lawson
DAVID M. LAWSON
United States District Judge

Dated: July 27, 2022